

ATTORNEY'S DOCKET NUMBER: 2004647-0011 (BU01-52)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Collins *et al.*

Examiner: To be assigned

Serial No.: 10/506,734

Group Art Unit: To be assigned

Filing Date: September 3, 2004

Title: Systems and Methods for Reverse Engineering Models of Biological Networks

Mail Stop PCT
Commissioner for Patents
Office of PCT Legal Administration
P.O. Box 1450
Alexandria, VA 22313-1450

RECEIVED

20 JUL 2006

To the attention of the Office of PCT Legal Administration:

Legal Staff
International Division

RENEWED PETITION UNDER 37 C.F.R. § 1.47(a)

In Response to the Decision on Petition Under 37 C.F.R. 1.47(a) mailed on November 14, 2005
(copy attached) Petitioner hereby submits the following:

1. Our office contacted the non-signing inventor, Dr. Jesper Tegner, by email on November 2, 2005 to inform him that Declaration and Assignment forms had been sent to his last known address and that we had not heard back from him. Dr. Tegner responded on November 3, 2005 in an email where he presented his concerns about signing the Declaration and Assignment documents and asked several questions about the documents. On the same day, our office answered Dr. Tegner's questions by email; and contacted him again by email on November 10, 2005. In particular, in this last email, our office specifically inquired about an address to which a copy of the application and new Declaration and Assignment forms could be sent and indicated that in absence of a reply from him, we would send these documents at his last known address. As to this date, Dr. Tegner has not responded to these last emails. A copy of all the above-mentioned emails are presented in **Exhibit A**.
2. Dr. Tegner's last known address indicated in several of the above-mentioned emails is: Karlavagen 90, S-115 22, Stockholm, Sweden.
3. A copy of the patent application, as filed, as well as new Declaration and Assignment forms were sent to Dr. Tegner, on December 1, 2005, by "Registered Mail". A self-addressed envelope was provided for Dr. Tegner to return the executed documents to us. A copy of the letter, dated

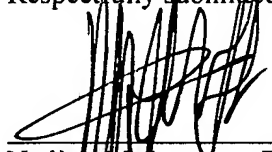
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November 28, 2005, forwarding these materials is included in **Exhibit B**. A copy of the Mailing Receipt for this letter is shown as **Exhibit C**.

4. On February 14, 2006, our office contacted the U.S. Postal Service to inquire about the above-mentioned letter. A copy of the letter acknowledging receipt of this inquiry by the U.S. Postal Service is shown in **Exhibit D**.
5. In a letter dated March 25, 2006, the U.S. Postal Service informed us that the letter sent to Dr. Tegner's last known address had been delivered on or about December 7, 2005 (see **Exhibit E**).
6. As of this date, Dr. Tegner has not responded to our letter.
7. Declaration documents executed by all the inventors, except for Dr. Tegner, were enclosed in our Response filed on October 28, 2005, as shown by the Stamped Return postcard acknowledging receipt of the Response (see **Exhibit F**). For convenience, a copy of the Declaration documents filed on October 28, 2005 is enclosed (see **Exhibit G**). As a whole, the Declaration document contains an unsigned signature block for non-signing inventor Tegner.

It is not believed that fees are required, beyond those which may otherwise be provided for in documents accompanying this paper. However, in the event that any additional fees are required for consideration of this paper, these fees are authorized to be charged to our Deposit Account No. 03-1721.

Respectfully submitted,


Nadège M. Lagneau, Ph.D.
Registration Number: 51,908

Dated: June 14, 2006

CHOATE, HALL & STEWART LLP
Patent Department
Two International Place
Boston, MA 02110
Tel: 617-248-5000
Fax: 617-248-4000

Certificate of Mailing

I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to Mail Stop PCT, Commissioner for Patents, Office of PCT Legal Administration, P.O. Box 1450, Alexandria, VA 22313-1450.

June 14, 2006
Date

Aveline
Signature

Beatrice M. Aveline, Ph.D.

Typed or Printed Name of person signing certificate



14 NOV 2005

UNITED STATES PATENT AND TRADEMARK OFFICE

SP1MR6/INH

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

Monica R. Gerber
CHOATE HALL & STEWART
Exchange Place
53 State Street
Boston, MA 02109-2804

Renewed Petition
Due 1-14-06
Final 6-14-06

CE/11/07

In re Application of:
GARDNER, Timothy, et al.

DECISION ON PETITION UNDER

U.S. Application No.: 10/506,734

37 CFR 1.47(a)

PCT No.: PCT/US03/06491

International Filing Date: 05 March 2003

Priority Date: 06 March 2002

Attorney's Docket No.: 2004647-0011

For: SYSTEMS AND METHODS FOR
REVERSE ENGINEERING MODELS
OF BIOLOGICAL NETWORKS

This decision is issued in response to applicants' "Petition Under 37 CFR 1.47(a)" filed 31 October 2005. Deposit Account No. 03-1721 will be charged the required petition fee.

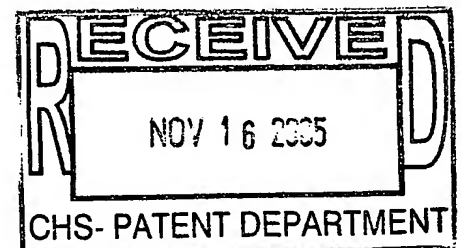
BACKGROUND

On 05 March 2003, applicants filed international application PCT/US03/06491 which claimed a priority date of 06 March 2002 and which designated the United States. The deadline for submission of the basic national fee was thirty months from the priority date, i.e., 06 September 2004.

On 03 September 2004, applicants filed a Transmittal Letter for entry into the national stage in the United States accompanied by, among other materials, payment of the basic national fee.

On 28 March 2005, the United States Designated/Elected Office (DO/EO/US) mailed a Notification Of Missing Requirement (Form PCT/DO/EO/905) indicating that an executed declaration in compliance with 37 CFR 1.497 was required.

On 31 October 2005, applicants filed a response to the Notification Of Missing Requirements (with required five month extension fee). The submission includes the petition under 37 CFR 1.47(a) considered herein. The petition seeks acceptance of the application without the signature of inventor, Jesper TEGNER, whom applicants argue has refused to execute the application.



DISCUSSION

A grantable petition under 37 CFR 1.47(a) must be accompanied by: (1) the fee under 37 CFR 1.17; (2) a statement of the last known address of the nonsigning inventor; (3) an oath or declaration executed by the other inventors on behalf of themselves and the nonsigning inventor; and (4) factual proof that the inventor refuses to execute the application or cannot be reached after diligent effort.

Applicants here have authorized a charge to deposit account number 03-1721 for the required petition fee, and the petition expressly states the last known address of the nonsigning inventor. Items (1) and (2) are therefore satisfied.

Regarding item (3), section 409.03(a) of the Manual of Patent Examining Practice (MPEP) states that:

An oath or declaration signed by all the available joint inventors with the signature block of the nonsigning inventor(s) left blank may be treated as having been signed by all the joint inventors on behalf of the nonsigning inventor(s), unless otherwise indicated.

Here, the petition refers only to the failure to obtain the signature of joint inventor Jesper TEGNER, implying that the signatures of the other inventors have been obtained. However, applicants have not included a declaration executed by the cooperating inventors (and containing an unsigned signature block for the nonsigning inventor). No declaration has been submitted at all. Accordingly, item (3) is not satisfied.

Regarding item (4), the petition refers to efforts made to obtain Dr. TEGNER's signature, including a mailing of the declaration to the inventor's last known address, two follow-up emails, and unsuccessful attempts to reach the inventor at a recently obtained telephone number.

The present record is insufficient to support the conclusion that the inventor has refused to sign the application or cannot be located after diligent effort. Pursuant to MPEP section 409.03(d), before it can be concluded that an applicant refuses to sign the application papers, firsthand evidence must be provided confirming that a copy of the complete application (including specification drawings and claims) has been provided to the last known address of the inventor. Applicant here has not provided such evidence. As noted above, applicant only claims to have mailed a copy of the declaration to the inventor, not the complete application. Moreover, no evidence of receipt by the inventor at this address has been provided (i.e., a signed return receipt). The failure of an inventor to respond to a single mailing, receipt of which has not been confirmed, is not considered a constructive refusal to sign the application. The evidence here is also insufficient to demonstrate that the inventor cannot be located after diligent effort (for example, no evidence has been provided to demonstrate that the last known address of the inventor is no longer current, and applicants have provided evidence that a new telephone number for the inventor was obtained only two days before the petition was mailed).

Before item (4) can be considered satisfied, applicants must provide further evidence that demonstrates either: (1) that the complete application papers have been delivered to the nonsigning inventor, and he has refused to execute the application papers; or (2) proper evidence that the inventor cannot be located after diligent effort. Such materials must be in the form required under section 409.03(d) of the MPEP.

CONCLUSION

Applicants' petition under 37 CFR 1.47(a) is **DISMISSED** without prejudice.

If reconsideration on the merits of the petition is desired, a proper response must be filed within **TWO (2) MONTHS** of the mail date of the present decision. Any request for reconsideration should include a cover letter entitled "Renewed Petition Under 37 CFR 1.47(a)" and must include the materials required to satisfy items (3) and (4) of a grantable petition, as discussed above. No additional petition fee is required.

Failure to file a proper response will result in abandonment of the application. Extensions of time are available under 37 CFR 1.136(a)

Please direct further correspondence with respect to this matter to Mail Stop PCT, Commissioner for Patents, Office of PCT Legal Administration, P.O. Box 1450, Alexandria, Virginia 22313-1450, with the contents of the letter marked to the attention of the Office of PCT Legal Administration.



Richard M. Ross
PCT Petitions Attorney
PCT Legal Office
Telephone: (571) 272-3296
Facsimile: (571) 273-0459

Saccocia, Sandra

From: Gerber, Monica
Sent: Wednesday, November 02, 2005 12:50 PM
To: 'jespert@ifm.liu.se'; 'jespert@nada.kth.se'
Cc: Saccocia, Sandra
Subject: Patent Application entitled "Systems and Methods for Reverse Engineering Models of Biological Networks" (U.S. Serial No. 10/506,734, claiming priority to PCT/US03/06491) (Corr. 2004647-0011)
Importance: High

Dear Dr. Tegner,

I am a patent attorney at the law firm of Choate, Hall & Stewart in Boston, and am writing to you in regards to the above-referenced patent applications on which you are listed as an inventor together with Drs. Jim Collins, Tim Gardner, Man Kit Steven Yeung, and Diego di Bernardo. A copy of the PCT application is attached. Based on this application, a so-called "national phase" application was filed in the United States. Under U.S. patent law, one of the requirements to obtain a patent in the U.S. is that the inventors review the application and sign a Declaration stating that they have reviewed the application and believe themselves to be inventors of the subject matter therein. We sent a copy of the Declaration to you for your signature some time ago at the following address:

Jesper Tegner
Karlavagen 90, S-115 22
Stockholm, Sweden

To date, we have not received any response from you. Our letter has not been returned to us, so we assume that it was delivered. My assistant, Sandra Saccocia, has attempted unsuccessfully to contact you by e-mail several times and also tried to phone you at the number (+46) 0703 28 29 89, which we found on your web site. I would very much appreciate it if you could please respond to this e-mail and let me know whether you would be willing to sign the Declaration (and also an Assignment to Boston University (BU), as we understand that the terms under which you were working when the invention was made obligated you to assign your rights in the invention to BU). We would then send a new Declaration and Assignment to you at whatever postal or e-mail address you specify, and copies of all paperwork associated with the filing of the patent application. If you have any questions or concerns regarding signing the Declaration and/or Assignment, please feel free to contact me by phone or e-mail.

I would really appreciate it if you could help us out by responding to this e-mail and letting me know what we can do to facilitate obtaining your signature on the these documents.

Best Regards,
Monica

Monica R. Gerber, M.D., Ph.D.
Associate, Intellectual Property Department
Choate, Hall & Stewart LLP
Two International Place
Boston, MA 02110
tel: 617 248 5071
fax: 617 248 4000
email: mgerber@choate.com

EXHIBIT A

11/2/05

Saccocia, Sandra

From: Jesper Tegner [jespert@ifm.liu.se]
Sent: Thursday, November 03, 2005 10:59 AM
To: Gerber, Monica
Cc: Jesper Tegner; Saccocia, Sandra
Subject: Re: Patent Application entitled "Systems and Methods for Reverse Engineering Models of Biological Networks" (U.S. Serial No. 10/506,734, claiming priority to PCT/US03/06491) (Corr. 2004647-0011)

Dear Monica,

thanks for your mail and excuse me for not having had this matter on the top of my agenda.

However, I do have a number of concerns/comments and questions regarding this.

1. What are the general implications for myself when signing this paper ?
2. to the best of my memory, an inventor is entitled to x % of the money that an invention brings in via a company. Is it true ? and what is x ?
3. what is the status of the provisional patents that were filed based on Yeung et al PNAS 2002 and Tegner et al PNAS 2003 ?
4. The current application appears to add the Science 2003 work to the two PNAS papers. what is the rationale behind that ? The only addition by the Science paper was to demonstrate that these network can be used for compound evaluation. They also tested this experimentally.
5. Im running a company together with a colleague where we use PNAS algorithms that I have developed, continue to develop, in order to analyze gene expression data. What are the implications of me signing the document.
6. Will Cellicon have the exclusive rights to use these algorithms for commercial purposes ?
7. In the paper (tegnert et al PNAS 2003) where the conceptual framework of this work was developed, Jeff Hasty was one coauthor, but I noticed that he is not on the patent application, why is that ?
8. The formulations in the application are very broad. For example, the writing include several linear models, search strategies etc, beyond what is described in the individual papers. How is this possible ?
9. Several companies around the world are using this framework, model, perturb the system and measure the response in order to characterize the underlying networks of interests. Do they have the freedom to operate given this patent ? Gene Networks Inc is one example. Gene network science is another example.
10. If I sign this document can I use the algorithms I developed (PNAS

2002, 2003) for network identification in my own company ? If not, what is an "appropriate" modification, an issue which is complicated by the broad coverage in the writing of this patent application.

11. What happens if I decide not to sign this document ?

Best Jesper

Gerber, Monica wrote:

> Dear Dr. Tegner,
>
> I am a patent attorney at the law firm of Choate, Hall & Stewart in
> Boston, and am writing to you in regards to the above-referenced
> patent applications on which you are listed as an inventor together
> with Drs. Jim Collins, Tim Gardner, Man Kit Steven Yeung, and Diego di
> Bernardo. A copy of the PCT application is attached. Based on this
> application, a so-called "national phase" application was filed in the
> United States. Under U.S. patent law, one of the requirements to
> obtain a patent in the U.S. is that the inventors review the
> application and sign a Declaration stating that they have reviewed the
> application and believe themselves to be inventors of the subject
> matter therein. We sent a copy of the Declaration to you for your
> signature some time ago at the following address:
>
>
> Jesper Tegner
>
> Karlavagen 90, S-115 22
>
> Stockholm, Sweden
>
>
> To date, we have not received any response from you. Our letter has
> not been returned to us, so we assume that it was delivered. My
> assistant, Sandra Saccocia, has attempted unsuccessfully to contact
> you by e-mail several times and also tried to phone you at the number
> (+46) 0703 28 29 89, which we found on your web site. I would very
> much appreciate it if you could please respond to this e-mail and let
> me know whether you would be willing to sign the Declaration (and also
> an Assignment to Boston University (BU), as we understand that the
> terms under which you were working when the invention was made
> obligated you to assign your rights in the invention to BU). We would
> then send a new Declaration and Assignment to you at whatever postal
> or e-mail address you specify, and copies of all paperwork associated
> with the filing of the patent application. If you have any questions
> or concerns regarding signing the Declaration and/or Assignment,
> please feel free to contact me by phone or e-mail.
>
> I would really appreciate it if you could help us out by responding to
> this e-mail and letting me know what we can do to facilitate obtaining
> your signature on the these documents.
>
> Best Regards,
> Monica
>
> Monica R. Gerber, M.D., Ph.D.
> Associate, Intellectual Property Department
> Choate, Hall & Stewart LLP
> Two International Place
> Boston, MA 02110
> tel: 617 248 5071
> fax: 617 248 4000
> email: mgerber@choate.com <mailto:mgerber@choate.com>

Saccocia, Sandra

From: Gerber, Monica
Sent: Thursday, November 03, 2005 1:59 PM
To: 'Jesper Tegner'
Cc: Saccocia, Sandra; 'Janine Anderson (jandersn@bu.edu)'; 'Ives, Catherine'; Jarrell, Brenda
Subject: RE: Patent Application entitled "Systems and Methods for Reverse Engineering Models of Biological Networks" (U.S. Serial No. 10/506,734, claiming priority to PCT/US03/06491) (Corr. 2004647-0011)

Dear Jesper,

Thank you very much for responding to my e-mail. I do understand that this matter has not been uppermost in your mind, given the many interesting and varied activities described on your web site.

Please be aware that I represent other parties that have an interest in this patent application and cannot provide independent legal advice to you. Furthermore, I do not have any knowledge of what commitments you may have made outside of your relationship with Boston University (e.g., after returning to Sweden), and a thorough answer to some of the questions you pose would require such an understanding. Therefore, the answers I have provided are somewhat limited. You may want to obtain your own legal counsel who would be able to assist you more fully. That said, please see my responses below, inserted after your questions.

I do hope that you will decide that it is appropriate for you to sign the Declaration and Assignment. Our records do not show that we ever sent you a paper copy of the application as filed. If that is indeed the case, we would like to send such a copy to you, together with copies of the associated paperwork and a new copy of the Declaration and Assignment, at any address you specify. Please feel free to contact me again if you require further information, though it will be subject to the limitations mentioned above.

Best Regards,

Monica

-----Original Message-----

From: Jesper Tegner [<mailto:jespert@ifm.liu.se>]
Sent: Thursday, November 03, 2005 10:59 AM
To: Gerber, Monica
Cc: Jesper Tegner; Saccocia, Sandra
Subject: Re: Patent Application entitled "Systems and Methods for Reverse Engineering Models of Biological Networks" (U.S. Serial No. 10/506,734, claiming priority to PCT/US03/06491) (Corr. 2004647-0011)

Dear Monica,

thanks for your mail and excuse me for not having had this matter on the top of my agenda.

11/3/05

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However, I do have a number of concerns/comments and questions regarding this.

1. What are the general implications for myself when signing this paper ?

The Declaration is rather self-explanatory. By signing it you acknowledge that the personal information pertaining to you (e.g., name, address, etc.) is correct, that you believe yourself to be a true and original inventor of the subject matter of the claims (together with the other inventors), and that you have reviewed the patent application and any amendments that have been filed. The "claims" are listed at the end of the application. You do not indicate that you yourself contributed to all of the claims. It is sufficient if you were an inventor of at least part of at least one claim. You also acknowledge that you will disclose any information that may be material to patentability to the U.S. Patent Office - this means that you would provide copies of any papers, publications, presentations, etc., in light of which the claimed invention may be considered obvious or lacking in novelty. Our law firm generally takes care of this by providing the Patent Office with a list (called an "Information Disclosure Statement") of all papers, patents, etc., that are referred to in the patent application itself and any others that the inventors, owners, or licensees of the patent application identify to us, together with copies. There is an established procedure for doing this. You also indicate that the invention claims priority to the listed earlier applications (i.e., the provisional applications you mentioned). This roughly means that the present application contains at least some (but not necessarily all) of the subject matter that was described in the earlier applications and that the legal requirements for priority (e.g., timing) have been met (which they have). You do not, by signing the Declaration, attest to a belief that the listed individuals are the only inventors or make any representations on behalf of the other inventors. The legal implications for you depend in part on whether you believe that the statements are true. For example, if you do not believe that you are an inventor of at least part of the claimed subject matter, then you would in theory be subject to penalties under U.S. law, as listed in the following paragraph:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

The most usual result when an inventor deliberately makes a false statement in a Declaration and it is discovered, is that the patent is held invalid if it ever ends up in court.

Other implications for you might depend on what other commitments you may have made and whether any of them conflict with the statements in the Declaration. I am not your legal counsel and in any case do not have sufficient information to comment further.

By signing the Assignment you formally transfer your ownership interest in the invention to Trustees of Boston University (otherwise, according to U.S. patent law, the inventors are the joint owners of the invention). I believe that the terms under which you worked at Boston University required that all inventions made during the course of your employment would be owned by BU. If this is the case, then regardless of whether you sign the Assignment, BU will own the invention - in fact you transferred your ownership interest already. Typically it is preferable, from the point of an owner such as BU and any potential licensee of the patent application to have a clear record of the transfer without needing to bring forth employment agreements if ownership is ever challenged.

2. to the best of

my memory, an inventor is entitled to x % of the money that an invention brings

in via a company. Is it true ? and what is x ? Typically universities do share the income derived from licensing the invention with the inventors, but this is not required by law. I am not sure what BU's policy is in this regard and have no idea what x might be. You would need to ask someone in Boston University's technology transfer office, e.g., Janine Anderson or Catherine Ives, who are cc'd on this e-mail.

3. what is the status of the provisional patents that were filed based on Yeung et al PNAS 2002 and Tegner et al PNAS 2003 ? These applications expired (provisional applications always expire after 1 year). The subject matter was at least in part rolled into this application (but perhaps not all of it).

4. The current application appears to add the Science 2003 work to the two PNAS papers.

what is the rationale behind that ? The only addition by the Science paper was to demonstrate

that these network can be used for compound evaluation. They also tested this

experimentally. Using the network for compound evaluation is part of the invention (and quite a useful part).

5. Im running a company together with a colleague where we use PNAS algorithms

that I have developed, continue to develop, in order to analyze gene expression

data. What are the implications of me signing the document. I cannot comment on this in detail because firstly, I am not your legal counsel. Furthermore, I do not know what representations you may have made to the company or what your obligations to the company might be, and I do not know whether your activities at the company utilize any aspect of the claimed invention and, if so, in what way and with what result. Furthermore, I do not know where your company's activities will take place. The application we are considering here is a **U.S. patent application**, and the extent to which it will affect your company's activities may depend in part on where the activities take place. Again, this is an issue on which you should seek your own legal counsel.

6. Will Cellicon have the exclusive rights to use these algorithms for commercial purposes ? I cannot comment on what rights Cellicon or other parties may have obtained in the patent application from BU. You could address this question to Janine or Catherine. Furthermore, we do not know at this point what claims will actually issue from the patent application. In addition - a patent does not give anyone the "right to use" the claimed subject matter. All it provides is the right to exclude others. For example, if I have a patent on a complicated machine that uses a particular type of gear, I would not be free to make or use the machine if someone else had a patent on the gear that is part of the machine. But I would have the right to prevent others from making the machine. I also note that the owner of the patent can typically prevent others from making, using, or selling the invention for all purposes, both commercial and non-commercial (subject to certain limitations, some of which apply in particular fields and some of which apply if the invention was developed using government funds).

7. In the paper (tegnier et al PNAS 2003) where the conceptual framework of this work was developed, Jeff Hasty was one coauthor, but I noticed that he is not on the patent

application, why is that ? The invention is defined by the claims. The standard for inventorship requires that an inventor make an inventive contribution to the "conception" of at least part of the claimed subject matter. Simply working on a project under another individual's direction is not sufficient - one actually needs to contribute ideas, and those ideas need to be present in the claims (not just in the text of the patent application). I suggest that you discuss this issue with the other inventors and, if it remains unclear, then inventorship can be revisited. For example, a formal inventorship analysis could be performed. In fact, the issue of inventorship is always revisited at the time the patent issues, since we don't know until that time which claims will actually issue.

8. The formulations in the application are very broad. For example, the writing include several linear models, search strategies etc, beyond what is described in the individual papers. How is this possible ? We can describe anything in a patent application, including the so-called "prior art", which may be useful for making or performing the claimed invention. For example, if I invent a new machine, I can describe all sorts of gears, motors, etc., that might be parts of the machine, even if those individual components were previously known. We can also claim anything, though we try to claim subject matter that we believe is patentable. The individual who examines the patent application will decide what claims the applicants are entitled to. Furthermore, there is no need to limit the patent application to what was described in particular papers.

9. Several companies around the world are using this framework, model, perturb the system and measure the response in order to characterize the underlying networks of interests. Do they have the freedom to operate given this patent ? Gene Networks Inc is one example. Gene network science is another example. I can't comment on this.

10. If I sign this document can I use the algorithms I developed (PNAS 2002, 2003) for network identification in my own company ? If not, what is an "appropriate" modification, an issue which is complicated by the broad coverage in the writing of this patent application. I cannot comment on this both because I do not have nearly enough information to do so and because I am not your legal counsel. My comments in response to question 5 are also relevant.

11. What happens if I decide not to sign this document ? Here I will limit my comments to the implications for the patent application if you do not sign. Briefly - a Declaration from all inventors is required for the patent examination process to proceed, with certain exceptions. If an inventor is unwilling to sign or cannot be found, one can submit a petition to the Patent Office on behalf of the other inventors or the owner of the patent application, detailing efforts to locate the inventor and/or obtain the signature. The Patent Office may grant the petition, in which case the patent application process can proceed without the signature of the missing inventor, who can always join in at a later point. Or the Patent Office may deny the petition. I have not investigated the possible implications if a petition is denied, but in my experience if one can document that diligent efforts were made to locate the individual and obtain their signature, such petitions are usually granted.

Best Jesper

Gerber, Monica wrote:

11/3/05

Saccocia, Sandra

From: Gerber, Monica
Sent: Thursday, November 10, 2005 5:08 PM
To: 'Jesper Tegner'
Cc: Saccocia, Sandra; 'Ives, Catherine'; 'janderson@bu.edu'
Subject: RE: Patent Application entitled "Systems and Methods for Reverse Engineering Models of Biological Networks" (U.S. Serial No. 10/506,734, claiming priority to PCT/US03/06491) (Corr. 2004647-0011)

Dear Jesper,

I have not heard back from you in answer to the e-mail that I sent last Thursday, in which I offered answers to a number of your questions. I trust that Catherine Ives' subsequent e-mail provided additional useful information. We would still very much like to send you a copy of the application as filed, together with another copy of the Declaration and Assignment for you to sign and return to us. Please let us know the address to which we should send these materials. If we do not hear from you by next Monday, we will send the materials by certified mail, return receipt requested, to the address we have in our records for you, which is:

Jesper Tegner
Karlavagen 90, S-115 22
Stockholm, Sweden

If you decide that you will not return the executed Declaration and Assignment to us within a reasonable period of time we will continue prosecuting the patent application without them, as explained in my previous e-mail.

Best Regards,
Monica

Monica R. Gerber, M.D., Ph.D.
Associate, Intellectual Property Department
Choate, Hall & Stewart LLP
Two International Place
Boston, MA 02110
tel: 617 248 5071
fax: 617 248 4000
email: mgerber@choate.com

Best Regards,
Monica

-----Original Message-----

From: Jesper Tegner [mailto:jespert@ifm.liu.se]
Sent: Thursday, November 03, 2005 10:59 AM
To: Gerber, Monica
Cc: Jesper Tegner; Saccocia, Sandra
Subject: Re: Patent Application entitled "Systems and Methods for Reverse Engineering Models of Biological Networks" (U.S. Serial No. 10/506,734, claiming priority to PCT/US03/06491) (Corr. 2004647-0011)

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thanks for your mail and excuse me for not having had this matter on the top of my agenda.

However, I do have a number of concerns/comments and questions regarding this.

Monica R. Gerber, M.D., Ph.D.

(617) 248-5071

mgerber@choate.com

CERTIFIED MAIL RETURN RECEIPT REQUESTED

November 28, 2005

Jesper Tegner
Karlavagen 90, S-115 22
Stockholm, Sweden

Re: Patent Application for "Systems and Methods for Reverse Engineering Models of Biological Networks"
Serial No.: 10/506,734, Filing Date: September 3, 2004
National Phase of: PCT/US03/06491
Inventors: Timothy S. Gardner, et al.
Our Ref. No. 2004647-0011

Dear Dr. Tegner:

We are in receipt of the Notice of Missing Requirements Under 35 U.S.C. 371 In the United States Designated/Elected Office in this case, a copy of which is enclosed. Accordingly, enclosed you will find Declaration and Assignment forms for the above-captioned patent application.

Also enclosed is a copy of the application and related documents as filed with the United States Patent & Trademark Office.

Please review and sign the forms where indicated. Note that the Assignment form should be notarized but the Declaration does not need to be notarized. Alternately, if it is inconvenient to have the Assignment notarized, it can instead be signed by two individuals who witness your signature.

Please be advised that if you notice any errors in the document, please let us know as soon as possible so that we may send you a corrected version. This will ensure that the document is filed with the USPTO in a timely manner.

We ask that you ensure that the documents are executed and returned to my attention as soon as possible. A self-addressed envelope is enclosed for your convenience. Should we not receive the executed documents by December 31, 2005, we will assume that you do not intend to sign it and will proceed accordingly.

EXHIBIT B

Should you have any questions or comments, please do not hesitate to contact me.

Very truly yours,



Monica R. Gerber, M.D., Ph.D.
Patent Attorney

MRG:sas
Enclosures

cc: Peter Kliem (w/enclosure)
Ms. Janine Anderson (w/enclosure)
Dr. Catherine L. Ives (w/enclosure)
Brenda Herschbach Jarrell, Esq. (w/o enclosure)

4012558_1.DOC

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☒ Without Postal Insurance

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To Be Completed By Customer (Please Print) All Entries Must Be in Ballpoint or Typed	FROM	CHUCK HALL + STUART MONICA GERBER 2 International Place BOSTON, MA 02109 Jesper Tegner Karlavägen 90 S-115 22 Stockholm, Sweden
	TO	

PS Form 3806, **Receipt for Registered Mail** Copy 1 - Customer
May 2004 (7530-02-000-9051) (See Information on Reverse)
For domestic delivery information, visit our website at www.usps.com

United States Postal Service
International EMS Inquiry Center
PO Box 39955
Denver CO 80239-0955



February 14, 2006

Case Number: DE029152



SANDRA SACCOCCIA
CHOATE HALL AND STEWART
2 INTERNATIONAL PL
BOSTON MA 02110-4104

Dear Customer:

We have received your inquiry about an international item you mailed. Your inquiry has been assigned the case number shown above. If you contact us, please include this case number. This will help us to identify and respond to your inquiry.

While we have processed your inquiry, it may take a lengthy period of time for a response to be received from the foreign postal administration. Under international agreements, however, we must allow an appropriate period of time for them to respond to our inquiry. We will notify you as soon as a response is received. Please do not file a duplicate inquiry while we are waiting for their reply.

If you sent a registered article, the maximum indemnity payable to all countries is \$44.86, plus postage. If your item contained a postal money order, you must file a Form 6401, *Domestic Money Order Inquiry*, at your local Post Office. If your item contained a bank money order or other financial document, such as a personal check or a cashier's check, we recommend you contact the bank concerning their stop payment and replacement procedures.

If, at any time, you want us to stop processing this inquiry because the article has been delivered or returned, please complete the section below and return this letter to us. A return envelope is enclosed for your convenience.

Thank you,

Terry Street
Supervisor
International Claims and Inquiries Office

Please stop processing this inquiry because:

Case Number: DE029152

☐ The article was delivered to the addressee.

☐ The article has been returned to me.

☐ Other: _____

Signed: _____ Date: _____

EXHIBIT D

United States Postal Service
International EMS Inquiry Center
PO Box 39955
Denver CO 80239-0955



March 25, 2006

Case Number: DE029152



SANDRA SACCOCIA
CHOATE HALL AND STEWART
2 INTERNATIONAL PL
BOSTON MA 02110-4104

Dear Customer:

This is in further response to the inquiry you recently filed on an international Registered Letter, article number RB986874135US, which you sent to Sweden.

The postal service of Sweden has advised us that this article was delivered on or about December 7, 2005.

We are pleased to have been of assistance to you in determining the disposition of this article.

Sincerely,
Terry Street
Supervisor
International Claims and Inquiries

EXHIBIT E

Filed: October 28, 2005

JCO3 Rec'd PCT/PTO 31 OCT 2005

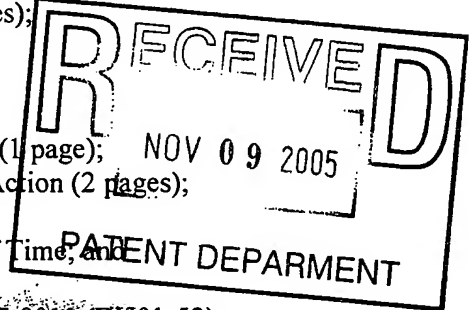
SP1MRG/WH

The Patent and Trademark Office stamping
sets forth and receipt date (or both the receipt date and the Serial Number)
of patent papers identified as follows:

Applicant:	Collins, et al.	Examiner:	
Serial No.:	10/506,734	Art Unit:	
Filed:	September 3, 2004		
For:	SYSTEMS AND METHODS FOR REVERSE ENGINEERING MODELS OF BIOLOGICAL NETWORKS		

Documents Enclosed:

1. Response to Notice to File Missing Parts of Nonprovisional Application (1 page);
2. Copy of Notice to File Missing Parts of Nonprovisional Application (2 pages);
3. Transmittal of Response to the Notice to File Missing Parts (1 page);
4. Petition for Extension of Time (1 page);
5. Copy of Statement Under 37 C.F.R. § 1.47(a) (1 page);
6. Copy of Petition Under 37 C.F.R. § 1.47(a) (2 pages);
7. Copy of Exhibits A and B (4 pages)
8. Executed Declarations (12 pages);
9. Executed Appointment of Attorney (1 page);
10. Executed Written Assertion of Small Entity Status (1 page);
11. Executed Establishing Right of Assignee to Take Action (2 pages);
12. Copy of Executed Assignments (16 pages);
13. Check in the amount of \$1,080.00 for Extension of Time, and
14. Return Postcard



Attorney: MRG
4004734_1.DOC

Case No. 2004647-0012 (BU01-52)

Cellicon

EXHIBIT F

DECLARATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SYSTEMS AND METHODS FOR REVERSE ENGINEERING MODELS OF BIOLOGICAL NETWORKS

the specification of which (I authorize Choate, Hall & Stewart to check one of the following, three choices, and fill in the blanks, if applicable):

___ is attached hereto

X was filed on September 3, 2004 as Serial No. 10/506,734 and amended on _____ (if applicable).

_____ was filed as PCT international application No. _____, on _____ and was amended under PCT Article 19 on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledged the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

Priority Claimed

(Number)	(Country)	(Day/Month/Year/Filed)	Yes	No
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_____	_____	_____	Yes	No
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I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America listed below

and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.) (filing date) (status-patented, pending, abandoned)

PCT Applications designating the United States:

PCT/US03/06491 March 5, 2003

(PCT Appl. No.) (filing date) (status-patented, pending, abandoned)

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national filing date of this application.

Provisional Application(s):

(Application Number) (Filing Date) (Status-patented, pending, abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor Timothy S. Gardner

Inventor's signature _____ Date: _____

Residence 993 Greendale Avenue, Needham, MA 02492

Citizenship US

Post Office Address Same

Full name of second inventor James J. Collins

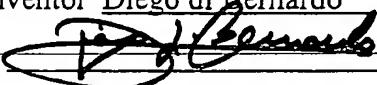
Inventor's signature _____ Date: _____

Residence 118 Glen Avenue, Newton, MA 02459

Citizenship U.S.

Post Office Address Same

Full name of third inventor Diego di Bernardo

Inventor's signature  Date: 5/20/2005

Residence Largo Francesco Torraca 71, Naples 80133, Italy

Citizenship Italian

Post Office Address Same

Full name of fourth inventor Jesper Tegner

Inventor's signature _____ Date: _____

Residence Karlavagen 90, S-115 22 Stockholm, Sweden

Citizenship Swedish

Post Office Address Same

Full name of fifth inventor Man Kit Stephen Yeung

Inventor's signature _____ Date: _____

Residence Utah State University, Department of Mathematics, 3900 Old Main Road, Room
Lund 305, Logan, Utah 84322-3900

Citizenship _____

Post Office Address Same

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As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

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SYSTEMS AND METHODS FOR REVERSE ENGINEERING MODELS OF BIOLOGICAL NETWORKS

the specification of which (I authorize Choate, Hall & Stewart to check one of the following, three choices, and fill in the blanks, if applicable):

___ is attached hereto

X was filed on September 3, 2004 as Serial No. 10/506,734 and amended on
_____ (if applicable).

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on _____ and was amended under PCT Article 19
on _____ (if applicable).

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Prior Foreign Application(s):

Priority Claimed

_____ (Number)	_____ (Country)	_____ (Day/Month/Year/Filed)	_____ Yes	_____ No
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_____ (Number)	_____ (Country)	_____ (Day/Month/Year/Filed)	_____ Yes	_____ No
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I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America listed below

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(Application Serial No.) (filing date) (status-patented, pending, abandoned)

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PCT/US03/06491	March 5, 2003	
(PCT Appl. No.)	(filing date)	(status-patented, pending, abandoned)

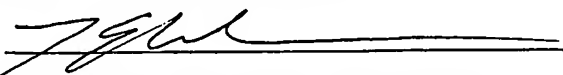
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Provisional Application(s):

(Application Number)	(Filing Date)	(Status-patented, pending, abandoned)
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor Timothy S. Gardner

Inventor's signature  Date: 5/16/05

Residence 993 Greendale Avenue, Needham, MA 02492

Citizenship US

Post Office Address Same

Full name of second inventor James J. Collins

Inventor's signature _____ Date: _____

Residence 118 Glen Avenue, Newton, MA 02459

Citizenship U.S.

Post Office Address Same

Full name of third inventor Diego di Bernardo

Inventor's signature _____ Date: _____

Residence Largo Francesco Torraca 71, Naples 80133, Italy

Citizenship Italian

Post Office Address Same

Full name of fourth inventor Jesper Tegner

Inventor's signature _____ Date: _____

Residence Karlavagen 90, S-115 22 Stockholm, Sweden

Citizenship Swedish

Post Office Address Same

Full name of fifth inventor Man Kit Stephen Yeung

Inventor's signature _____ Date: _____

Residence Utah State University, Department of Mathematics, 3900 Old Main Road, Room
Lund 305, Logan, Utah 84322-3900

Citizenship _____

Post Office Address Same

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the specification of which (I authorize Choate, Hall & Stewart to check one of the following, three choices, and fill in the blanks, if applicable):

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Priority Claimed

(Number)	(Country)	(Day/Month/Year/Filed)	Yes	No
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_____	_____	_____	_____	_____
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PCT/US03/06491 March 5, 2003

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Provisional Application(s):

(Application Number) (Filing Date) (Status-patented, pending,
abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor Timothy S. Gardner

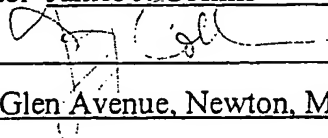
Inventor's signature _____ Date: _____

Residence 993 Greendale Avenue, Needham, MA 02492

Citizenship US

Post Office Address Same

Full name of second inventor James J. Collins

Inventor's signature 

Date: 2 June 2005

Residence 118 Glen Avenue, Newton, MA 02459

Citizenship U.S.

Post Office Address Same

Full name of third inventor Diego di Bernardo

Inventor's signature _____

Date: _____

Residence Largo Francesco Torraca 71, Naples 80133, Italy

Citizenship Italian

Post Office Address Same

Full name of fourth inventor Jesper Tegner

Inventor's signature _____

Date: _____

Residence Karlavagen 90, S-115 22 Stockholm, Sweden

Citizenship Swedish

Post Office Address Same

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Inventor's signature _____

Date: _____

Residence Utah State University, Department of Mathematics, 3900 Old Main Road, Room
Lund 305, Logan, Utah 84322-3900

Citizenship _____

Post Office Address Same

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Priority Claimed

(Number)	(Country)	(Day/Month/Year/Filed)	Yes	No
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PCT Applications designating the United States:

PCT/US03/06491	March 5, 2003	
(PCT Appl. No.)	(filing date)	(status-patented, pending, abandoned)

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Provisional Application(s):

(Application Number)	(Filing Date)	(Status-patented, pending, abandoned)
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full name of first inventor Timothy S. Gardner

Inventor's signature _____ Date: _____

Residence 993 Greendale Avenue, Needham, MA 02492

Citizenship US

Post Office Address Same

Full name of second inventor James J. Collins

Inventor's signature _____ Date: _____

Residence 118 Glen Avenue, Newton, MA 02459

Citizenship U.S.

Post Office Address Same

Full name of third inventor Diego di Bernardo

Inventor's signature _____ Date: _____

Residence Largo Francesco Torraca 71, Naples 80133, Italy

Citizenship Italian

Post Office Address Same

Full name of fourth inventor Jesper Tegner

Inventor's signature _____ Date: _____

Residence Karlavagen 90, S-115 22 Stockholm, Sweden

Citizenship Swedish

Post Office Address Same

Full name of fifth inventor Man Kit Stephen Yeung

Inventor's signature  Date: May 21, 2005

Residence 1703 East 1030 North, Logan, Utah 84341

Citizenship Hong Kong

Post Office Address Same

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